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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,305	08/22/2003	Hisasi Goto	1118.68269	9206

7590 03/25/2008
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EXAMINER

MAHMOOD, REZWANUL

ART UNIT	PAPER NUMBER
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2164

MAIL DATE	DELIVERY MODE
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03/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/646,305		GOTO ET AL.	
	Examiner		Art Unit	
	REZWANUL MAHMOOD		2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the communication filed on December 3, 2007.

Response to Amendment

2. Claims 1-10 are pending in this office action.

Response to Arguments

3. Applicant's arguments filed on December 3, 2007 have been fully considered but they are not persuasive for the following reasons:

Applicant argues that the amended features "not previously performed" and "to update a plurality of records" overcome the Toub and Cohen reference, and that the prior art does not teach or even suggest the feature "the updating function processes new data, and it does not return the database to a previous state, as done with backup data".

Examiner respectfully disagrees all of the allegations as argued. Examiner, in his previous office action, gave detail explanation of claimed limitation and pointed out exact locations in the cited prior art.

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. See MPEP 2111 [R-1]

Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the

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opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Toub teaches in Column 5 lines 3-56, Column 9 lines 47-67, and Column 10 lines 1-11 about data manipulations that changes data in the first computer, which modifies the content of the second computer. These modifications can be data manipulations that were not performed before. Toub teaches in Column 5 lines 3-56, Column 6 lines 35-61 and Cohen teaches in Column 5 lines 26-30, Column 6 lines 64-67, Column 7 lines 1-2 about data manipulations in the first computer being communicated to the second computer and plurality of records in the database of the second computer system being updated. The communicated manipulations can be in the form of a log file which can be accessed to reconstruct any changes made in the first computer system.

For the above reasons, Examiner believed that rejection of the last Office action was proper.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toub (US Patent 6,674,450) in view of Cohen (US Patent 5,903,898).

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6. With respect to claim 1, Toub discloses a method for persisting data manipulations in a transaction processing system that consists of a first computer system issuing a data manipulation request to a database having a plurality of records and a second computer system accessing said database according to said data manipulation request (Toub: Column 5, lines 3-56; Column 4, lines 9-29; Figure 2), said method comprising:

a step where said first computer system designates a search condition, requesting said second computer system to retrieve records that satisfy said search condition from said database; a step where said second computer system retrieves all records that satisfy said search condition designated by said first computer system from said database, sending the contents thereof back to said first computer system (Toub: Column 5, lines 3-56);

a step where said first computer system executes preset , not previously performed, data manipulations on a memory located on said first computer to said database objects, which correspond to contents of records retrieved by said second computer system (Toub: Column 5, lines 3-56; Column 9, lines 47-67; Column 10, lines 1-11; Here data manipulations changes the data in the first computer, which modifies the content of the second computer. These modifications can be data manipulations that were not performed before).

However, Toub does not disclose explicitly:

recording the contents of said data manipulations into said memory as a log by a record;

The Cohen reference, however, discloses storing information changes made to the database by data manipulation as a log file (Cohen: Column 5, lines 26-30; Column 6, lines 64-67; Column 7, lines 1-2).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to have combined the teachings of Cohen with the teaching of Toub to have added storing data manipulation records as a log file to the method of data manipulation in a transaction processing system to store database operations so that the operations can be re-performed to restore the database to its pre failure state after a failure (Cohen: Column 2, lines 23-28).

Toub in view of Cohen discloses:

a step where said first computer system stores the contents of said database object and said log after the data manipulations into a message, sending the message to the second computer system after all of said preset, not previously performed, data manipulations to the database object are completed, the message including both a plurality of database objects corresponding to a plurality of records, and also a plurality of logs (Toub: Column 5, lines 3-56; Cohen: Column 5, lines 26-30; Column 6, lines 64-67; Column 7, lines 1-2); and

a step where said second computer system accesses said database according to the contents of said log in said message received from said first computer system and the second computer system reflects said database object to said database to update plurality of records (Toub: Column 5, lines 3-56; Column 6, lines 35-61; Cohen: Column 5, lines 26-30; Column 6, lines 64-67; Column 7, lines 1-2; Here data manipulations in

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the first computer is communicated to the second computer and plurality of records in the database of the second computer system are updated. The communicated manipulations can be in the form of a log file which can be accessed to reflect any necessary changes to a database).

7. With respect to claim 2, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 1, wherein said first computer system only stores the database object whose contents are updated by said data manipulations and the database object that is added by said data manipulation in said message to send it to the second computer system (Cohen: Column 2, lines 47-57; Toub: Column 5, lines 3-56).

8. With respect to claim 3, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 1, wherein said first computer system stores contents of a database object after the final data manipulation in said message to send it to said second computer system when a plurality of data manipulations were executed for said database object (Cohen: Column 2, lines 47-57; Toub: Column 5, lines 3-56).

9. With respect to claim 4, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 3, wherein said first computer system stores contents of only one log, which is needed to reflect said

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database object stored in said message to said database, in said message when a plurality of data manipulations were executed for said database object (Cohen: Column 2, lines 61-63).

10. With respect to claim 5, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 4, wherein said first computer system stores one update log and contents after the final update in said message with respect to a predetermined database object when update was repeated to said database object (Cohen: Column 2, lines 47-52).

11. With respect to claim 6, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 4, wherein said first computer system stores one insertion log and contents after the update in a message with respect to a predetermined database object when update was executed after insertion for said database object (Cohen: Column 2, lines 47-52).

12. With respect to claim 7, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 4, wherein said first computer system stores one deletion log in said message and does not store contents with respect to a predetermined database object when deletion was executed after update for said database object (Cohen: Column 2, lines 35-63; Cohen: Column 3, lines 32-35).

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13. With respect to claim 8, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 4, wherein said first computer system does not store a log and contents with respect to a predetermined database object when deletion was executed after insertion for said database object (Cohen: Column 3, lines 32-35; Column 2, lines 35-46).

14. With respect to claim 9, Toub in view of Cohen discloses a data manipulating program for a remote database comprising:

a first step where a client computer, which communicates with a server computer accessing a database to execute transaction for said database, designates a search condition, requesting said server computer to retrieve records that satisfy said search condition from said database (Toub: Column 5, lines 3-56);

a second step where said client computer executes preset, not previously performed, data manipulations on a memory located on said client computer to database objects, which correspond to contents of the records retrieved by said server computer, recording the contents of the data manipulations into said memory as a log by a record (Toub: Column 5, lines 3-56; Cohen: Column 5, lines 26-30; Column 6, lines 64-67; Column 7, lines 1-2); and

a third step where, once all said data manipulations are performed, said client computer stores the contents of said database object and said log after said data manipulations into a message, sending said message to said server computer, said message including both a plurality of database objects corresponding to a plurality of

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records, and also a plurality of logs, thereby requesting to reflect said database object to said database to update a plurality of records when all of said preset data manipulations to said database object are completed (Toub: Column 5, lines 3-56; Column 5, lines 35-61; Column 11, lines 4-30; Cohen: Column 5, lines 26-30; Column 6, lines 64-67; Column 7, lines 1-2).

15. With respect to claim 10, Toub in view of Cohen discloses the data manipulating program for a remote database according to claim 9, wherein modules that make said client computer execute said first and second steps are programmed to vary from one business content to another, and wherein a module that makes said client computer execute said third step is programmed to be common to all business contents (Toub: Column 4, lines 63-67; Column 5, lines 1-56).

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Carlson reference (US Publication 2005/0278316) teaches about data manipulation between first and second computer connected with a database. The Cameron reference (US Publication 2002/0174136) teaches about transaction log files.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REZWANUL MAHMOOD whose telephone number is (571)272-5625. The examiner can normally be reached on M - F 10 A.M. - 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571)272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rezwanul Mahmood/
Examiner, Art Unit 2164

March 17, 2008

/Charles Rones/

Supervisory Patent Examiner, Art Unit 2164